



www.monoequip.com

Enter **Serial No.** here. _____

In the event of an enquiry please quote this serial number.



“OMEGA PLUS”

INCLUDING WIRECUT VERSION DEPOSITOR (400, 450,)

OPERATING AND MAINTENANCE MANUAL

The use of templates and/or accessories not produced or supplied by MONO Equipment will invalidate the machine's warranty

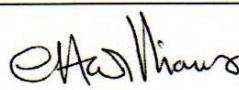
FILE 11



DECLARATION OF CONFORMITY

We hereby declare that this machine complies with the essential health and safety requirements of :-

- The Machinery Directive 2006 / 42 / EC
 - The Low voltage Directive 2014 / 35/ EC
 - The requirements of the Electromagnetic Compatibility Directive 2004 / 108EC, 91 / 263 / EEC, 92 / 31 / EEC
- Incorporating standards
EN55014-1:2006+A1:2009+A2:2011
EN55014-2:1997+A1:2001+A2:2008
- The General Safety of Machinery and food processing Standards applicable
 - Materials and Articles intended to come into contact with food Regulation (EC) No. 1935 / 2004
 - Good manufacturing practice for materials intended to come into contact with food – Regulation (EC) No.2023/2006

Signed			
G.A.Williams – Quality Manager			
Date			
Machine FG Code.		Machine Serial No.	

A technical construction file for this machine is retained at the following address:

MONO EQUIPMENT

Queensway,
Swansea West Industrial Park,
Swansea
SA5 4EB
UK

MONO EQUIPMENT is a business name of **AFE GROUP Ltd**
Registered in England No.3872673 VAT registration No.923428136

Registered office: Unit 9, Bryggen Road,
North Lynn Industrial Estate,
Kings Lynn,
Norfolk,
PE30 2HZ

Failure to adhere to the cleaning and maintenance instructions detailed in this booklet could affect the warranty of this machine.



WIRECUT VERSION

The use of templates and/or accessories not produced or supplied by MONO Equipment will invalidate the machine's warranty

SAFETY SYMBOLS

The following safety symbols are used throughout this product documentation and manual (available at www.monoequip.com).

Before using your new equipment, read the instruction manual carefully and pay special attention to information marked with the following symbols.



WARNING

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates a hazardous situation which, if not avoided, will result in electric shock.



CAUTION

Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION:

Commercial bakeries, kitchens and foodservice areas are environments where electrical appliances may be located close to liquids or operate in and around damp conditions or where restricted movement for installation and service is evident.

The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician, and connected to the correct supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements of the local electrical wiring regulations and any electrical safety guidelines.

We Recommend:

- Supplementary electrical protection with the use of a residual current device (RCD)
- Fixed wiring appliances incorporate a locally situated switch disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnector must meet the specification requirements of IEC 60947.



The supply to this machine must be protected by a **30mA RCD**

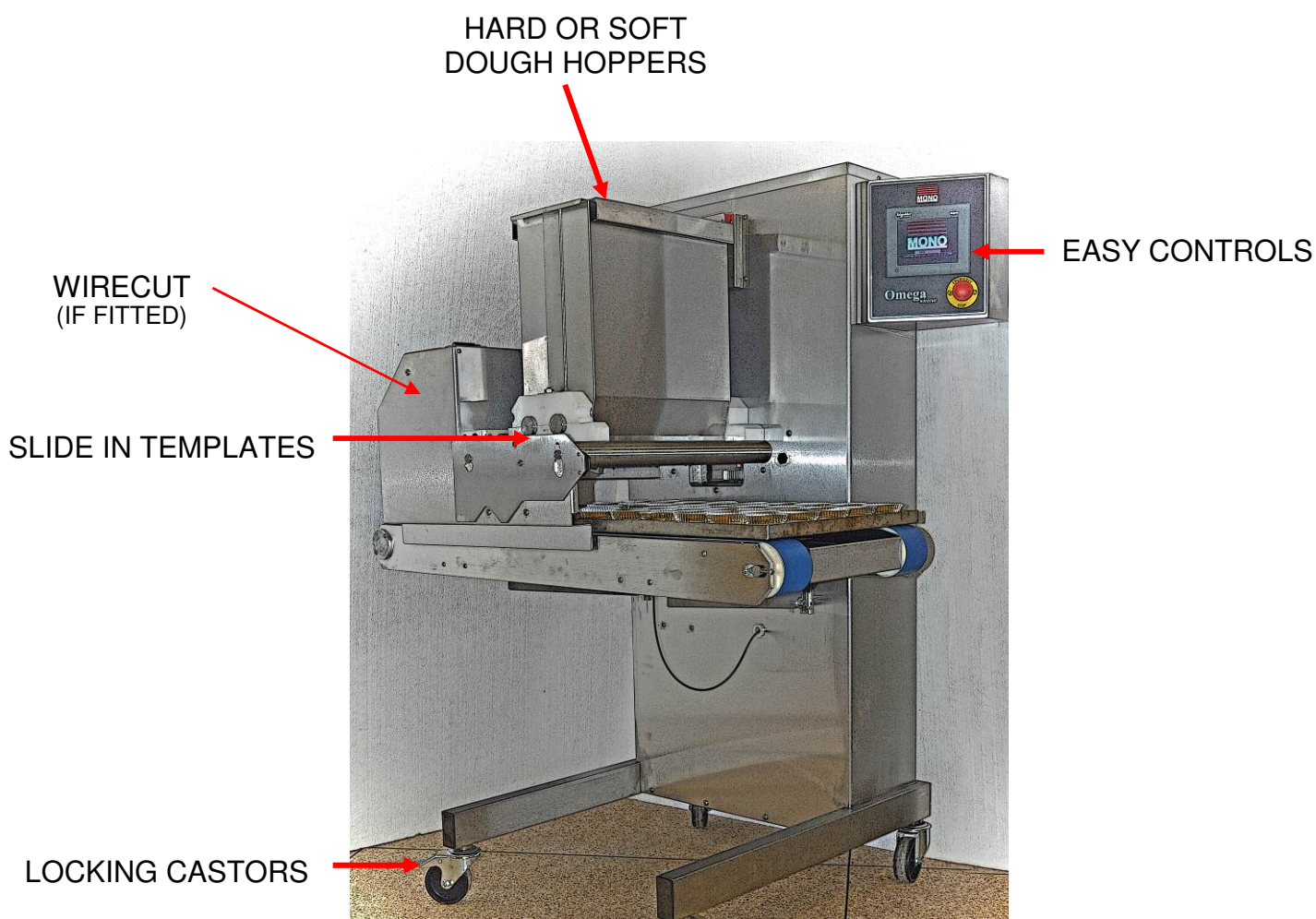
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1.0 INTRODUCTION

Omega
PLUS

- The innovative “five axis deposit” design of MONO’s “**Omega PLUS**” and “**Omega PLUS with wirecut**” depositor allows it to recreate most of the hand movements of the Master confectioner. This makes the “**Omega PLUS**” capable of exceptional accuracy of product weight, size and shape.
- Maintenance is kept to a minimum and the smooth body design makes daily cleaning quick and easy.
- Easy to use computer software gives access to 550 programs, which are stored in the memory and easily recalled for use or modification. Control is via a colour touch screen with graphically represented products, already installed, that can be created or edited to the required product.
- It is available with soft and hard dough hoppers. There is also a large selection of templates and nozzles as well as various shape biscuit dies to use with the wirecut version.



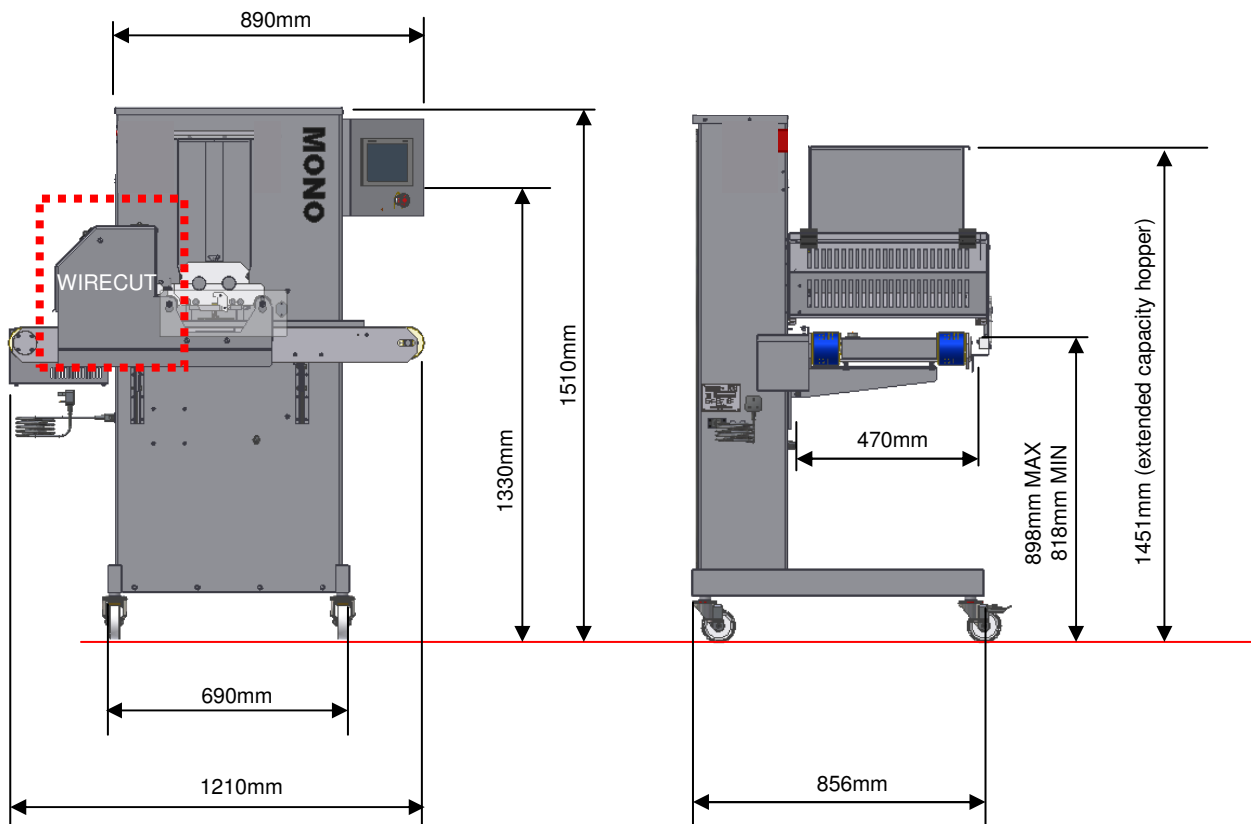
As it is our policy to improve our machines continuously,
we reserve the right to change specifications without prior notice

MODELS ARE AVAILABLE WITH OR WITHOUT WIRECUT OPTION

2.0 DIMENSIONS

Omega
PLUS

MODELS ARE AVAILABLE WITH OR WITHOUT WIRECUT OPTION



3.0 SPECIFICATIONS

**Omega
PLUS**

	<u>SOFT DOUGH</u>		<u>HARD DOUGH</u>	
MODEL (Nom. hopper width (mm))	400	450	400	450
Weight (with hopper fitted) (kg) :	196	210	216	235
Standard hopper Capacity (litre) :	20	22.5	21	24
Extended hopper Capacity (litre) :	36	41	31	35

Power: Single phase, 13A max load. Suitable for 200v, 220v, 230v, and 240v, 50-60 Hz supply.
MAX RATING 2.5kW single phase fused at 13A



The supply to this machine must be protected by a **30mA RCD**

Cycles per minute	= Up to 35
Min distance between trays	= 50mm
Max vertical travel	= 80mm
Max program storage	= 650
Number of languages	= 18 (additional in future)
Noise level	= Less than 85dB
Electronics	= All microprocessor controlled

NOTE:

The minimum deposit that can be made depends on several factors - recipe, mixing method, template size, nozzle size and deposit speed.

As a guide the following is the minimum that should be attempted:

Macaroons	6g.
Meringues	3g.
Choux Paste	5g.
Viennese	4g.
Sponge Drops	4g.

However, consult **Mono Equipment** if intended product falls outside the above general machine specification to determine the exact capabilities of the "Omega" with any specific product.

As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice

1 **Never use a machine in a faulty condition** and always report any damage.

2 **Only trained engineers** may remove parts that need a tool to remove them.



3 Always ensure hands are dry before touching any electrical appliance (including cable, switch and plug). **NEVER move machinery by pulling on the power cords or cables.**

4 **Ensure that the floor area around the OMEGA is clean to avoid slipping** – especially if carrying heavy hopper and template components to and from the machine.

5 **All operatives must be fully trained.**



Use of the machine can prove dangerous if:

- ❑ the machine is operated by **untrained or unskilled staff**
- ❑ the machine is not used for its **intended purpose**
- ❑ the machine is **not operated correctly**

All safety devices applied to the machine during manufacture and the operating instructions in this manual are required to operate this machine safely. The owner and the operator are responsible for operating this machine safely.

6 People undergoing training on the machine must be under **direct supervision**.

7 **Do not operate the machine with any panels or guards removed.**



They are there to protect you.

8 **No loose clothing or jewellery** should be worn while operating the machine.



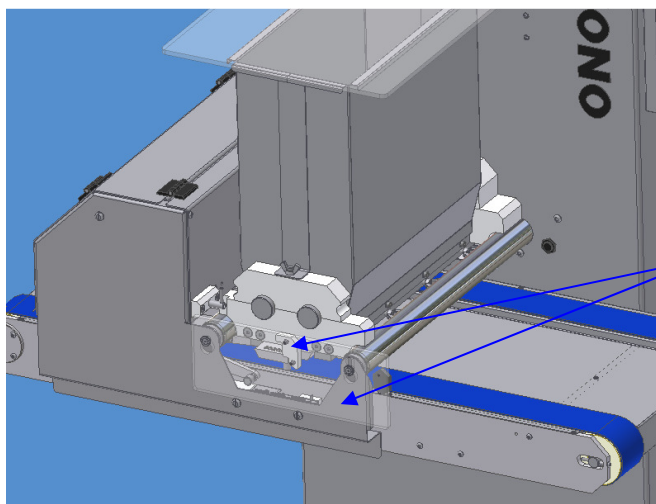
They could cause damage to the machine and person.

9 **Switch off power** at the mains isolator when machine is not in use and **before carrying out any cleaning or maintenance.**

- 10 The bakery manager or the bakery supervisor should carry out **daily safety checks** on the machine.



- 11 Do not operate machine without a hopper **template and the guard fitted correctly**.



**(11) HOPPER TEMPLATE AND
GUARD FITTED**

NOTE

Guard can be plastic or metal depending on the machine model



- 12 Due to the essential requirement for handling heavy components during cleaning, it is recommended that **protective footwear** be worn when carrying out such procedures.

**ALL CLEANING AND MAINTENANCE OPERATIONS MUST
BE MADE WITH THE MACHINE DISCONNECTED FROM
THE POWER SUPPLY.**



5.0 INSTALLATION

Omega
PLUS

1. Ensure that the depositor is connected to correct electric supply, as specified on the serial number plate on the side of the machine.



The supply to this machine must be protected by a **30mA RCD**

2. Ensure that the correct fuse rating is fitted in the electrical supply
3. Position the machine in the correct position for working and lock the two locking wheels to stop movement.

6.0 ISOLATION

 **IN AN EMERGENCY, SWITCH OFF AT THE ELECTRICAL MAINS WALL ISOLATOR, OR PUSH THE EMERGENCY STOP BUTTON.**

To release the emergency stop button, turn clockwise. 



STOP BUTTON

7.0 CLEANING INSTRUCTIONS

Omega
PLUS

NOTE:



- Cleaning must be carried out by fully trained personnel only.
- Isolate machine from mains supply before carrying out any cleaning.
- Do not steam clean or use a jet of water.

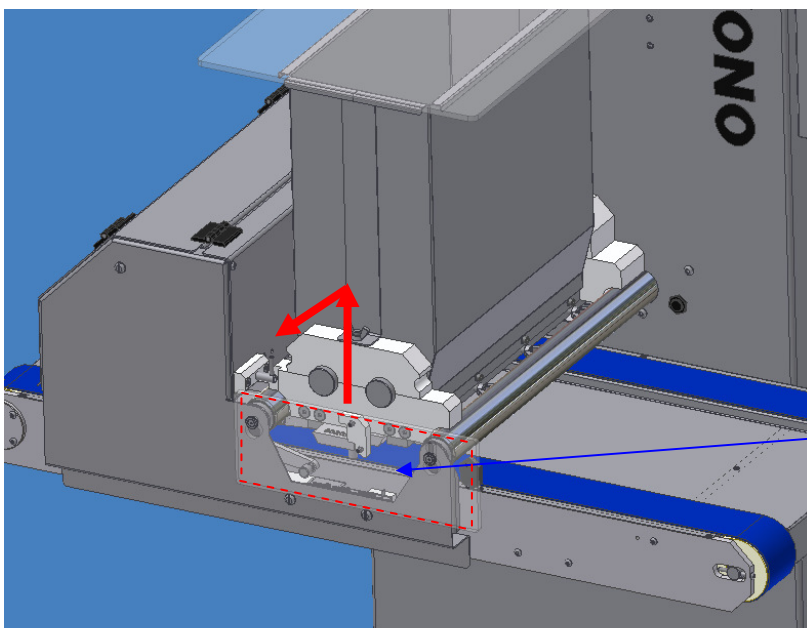
-Do not use any form of caustic detergent or abrasive cleaners. -

All the outer surfaces of the machine should be wiped over daily with warm soapy water.

HARD AND SOFT DOUGH HOPPERS BETWEEN PRODUCT MIX CHANGES

The feed hopper, pump assembly, template, nozzles etc. should be removed from the machine and dismantled for thorough cleaning between product mix changes.

1. Open hopper and remove excess mixture remaining.
2. Lift off front safety cover.



SAFETY COVER

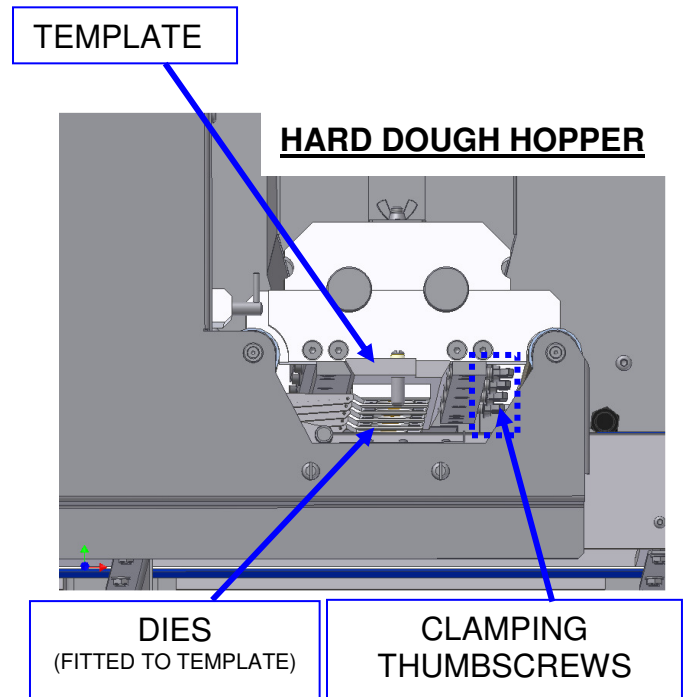
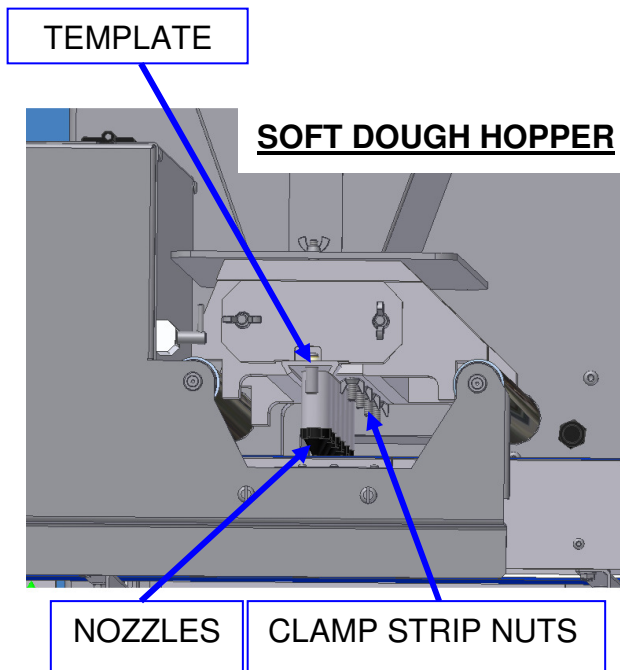
NOTE

Guard can be plastic or metal depending on the machine model

3. Slacken template clamp strip nuts or thumbscrews (depending on type of hopper)
Remove fitted template from pump assembly by sliding out to avoid subsequent damage.

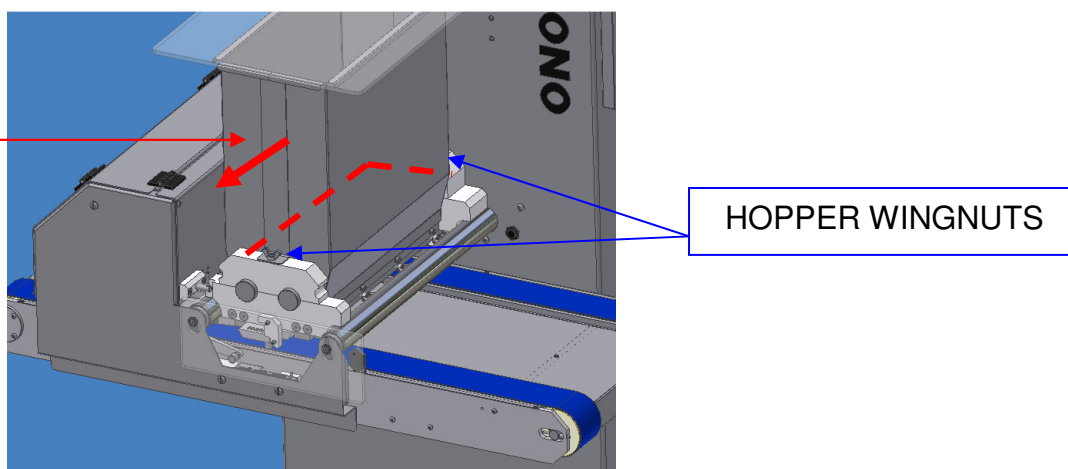
NOTE.

Thumbscrews only need to be released slightly to allow the template to slide away from the pump assembly. If loosened too much, the template will have to be supported.



- 4 To reduce weight and bulk, separate and remove empty feed hopper from pump assembly, whilst still on the machine, by unscrewing the wing nuts.

To gain access to the inner wing nut, slide the complete hopper away from the machine body slightly (keep on support bars) - this will also disengage the pump assembly from the drive shaft.



Ensure that the nuts are placed where they will not be lost.

SOFT DOUGH HOPPER

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PLUS



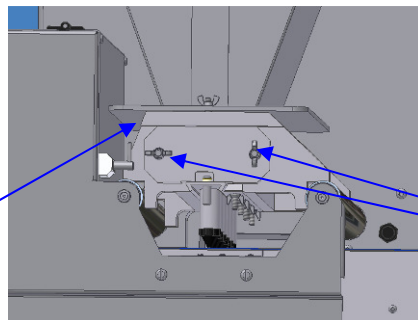
CAUTION:

The feed hopper and pump assembly exceeds 25kg and will need to be lifted off by two people, or dismantled into smaller components while still on the machine.

Take care to avoid damage to the sealing surface of the feed hopper during removal, cleaning, assembly and storage.

1. After removing the feed hopper, check condition of feed hopper seal.
2. Unscrew the end cap retaining nuts from the accessible side of the pump assembly.
[Ensure that the nuts are placed where they will not be lost.]

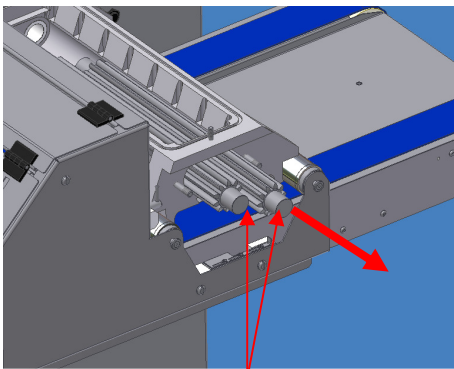
FEED HOPPER
SEALING SURFACE



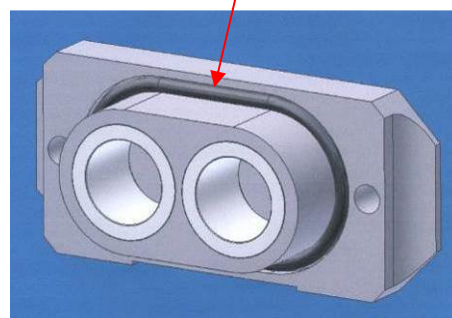
ENDCAP NUTS

3. Withdraw the end-cap with the pump gears.

Ensure that the 'O' sealing ring on the inside of the end cap is not damaged during cleaning.



PUMP GEARS
REMOVE WITH END CAP
(NOT SHOWN)



'O' RING IN GROOVE

END CAP

4. Remove remainder of pump assembly from the machine and remove remaining end-cap to fully dismantle pump assembly components for cleaning.

HARD DOUGH HOPPER

**CAUTION:**

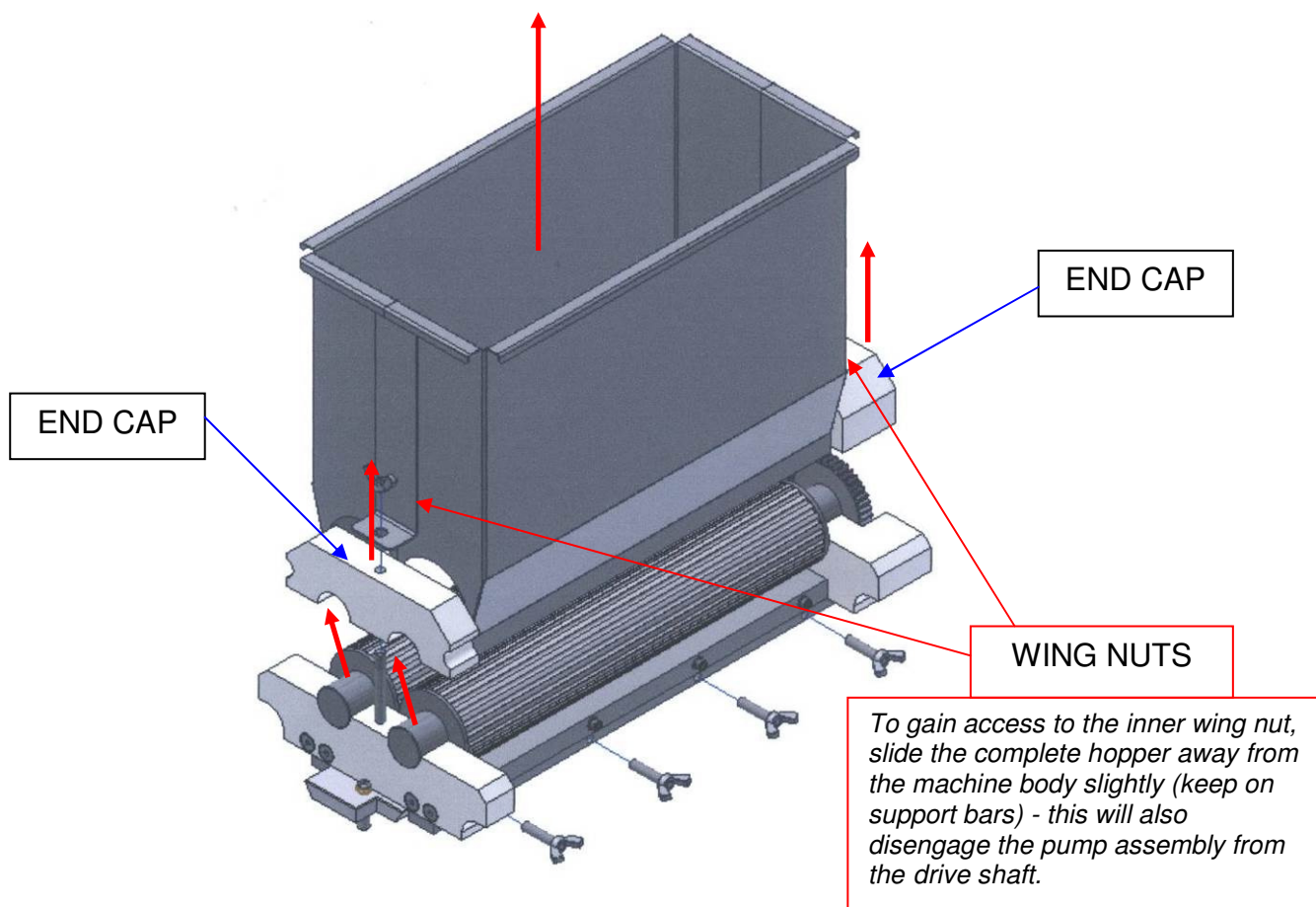
The feed hopper and pump assembly exceeds 25kg and will need to be lifted off by two people, or dismantled into smaller components while still on the machine.

To reduce weight and bulk, separate and remove empty feed hopper from pump assembly, whilst still on the machine, by unscrewing the wing nuts.

(Ensure that the nuts are placed where they will not be lost.)

The pump assembly will now be lighter and more easily removed.

1. Lift off both upper plastic end-caps.
2. Remove both gears from the assembly, one at a time, by lifting vertically.
3. Remove remainder of pump assembly from the machine for cleaning.

**NOTE:**

Use only warm soapy water to clean these parts. They should be rinsed and thoroughly dried before re-assembly.

The greatest care must be taken not to drop any parts.



Do not leave any components in the hopper.



8.0 OPERATING CONDITIONS

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PLUS

To obtain the best product results and consistent operation,

- ✓ Make sure the depositor is used on a **level floor**.
- ✓ Ensure **flat trays** of consistent length, width, material and edge dimensions are used.
- ✓ Ensure **undamaged nozzles and templates** are used.
- ✓ Keep the machine **clean**.



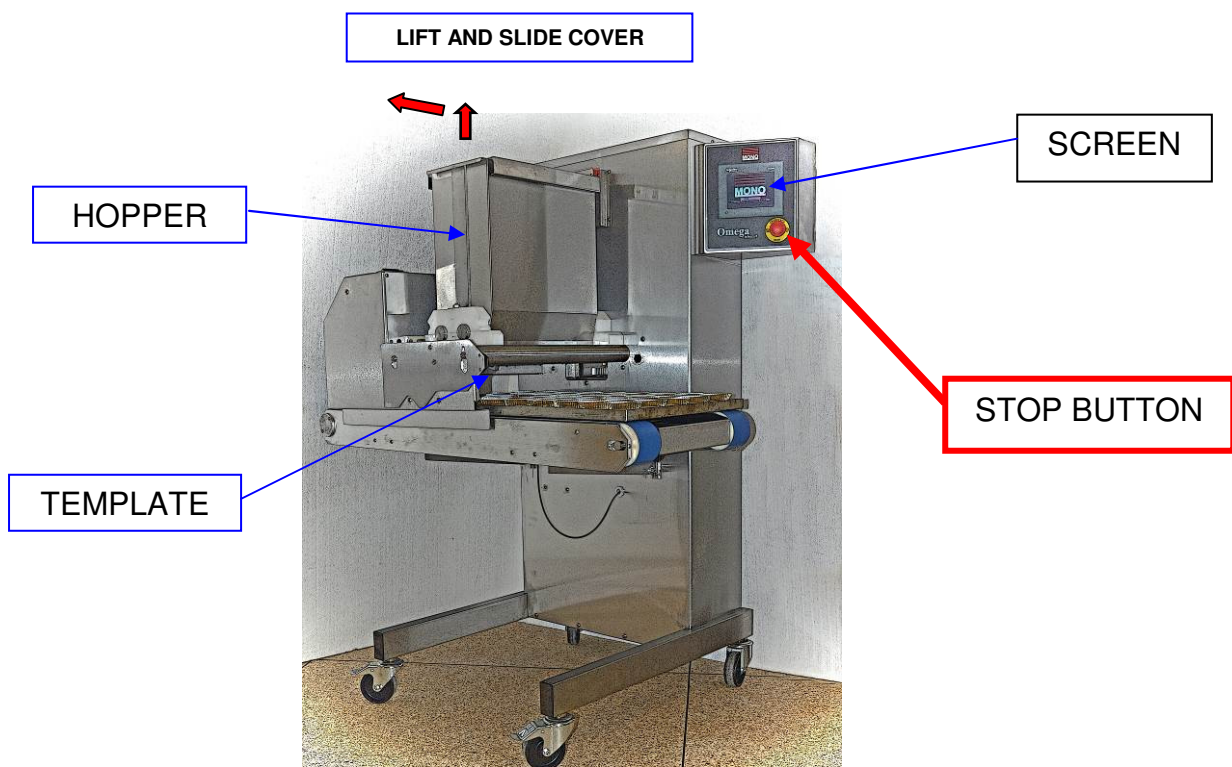
9.0 PREPARING FOR OPERATION

Omega
PLUS

The use of templates and/or accessories not produced or supplied by MONO Equipment will invalidate the machine's warranty

- 1 Select template and nozzles (and finger frame, if wirecut is to be used) and fit as section 9a & 9b (following pages). Fill hopper with mix and close hopper cover.

It is recommended that when heavy mixes are used, the inside of the hopper should be coated with vegetable oil; for lighter mixes such as meringue, dampen with water. The oil or water will help the mix to settle down the hopper walls and prevent air being sucked in.



- 2 Connect power cable to electrical supply.
Make sure stop button is in released position (turn clockwise if required).
- 3 Select an existing program or create a new program through the on-screen menus.
(see section 10 operation)
- 4 The machine is now ready for operation.

9a FITTING THE HOPPER

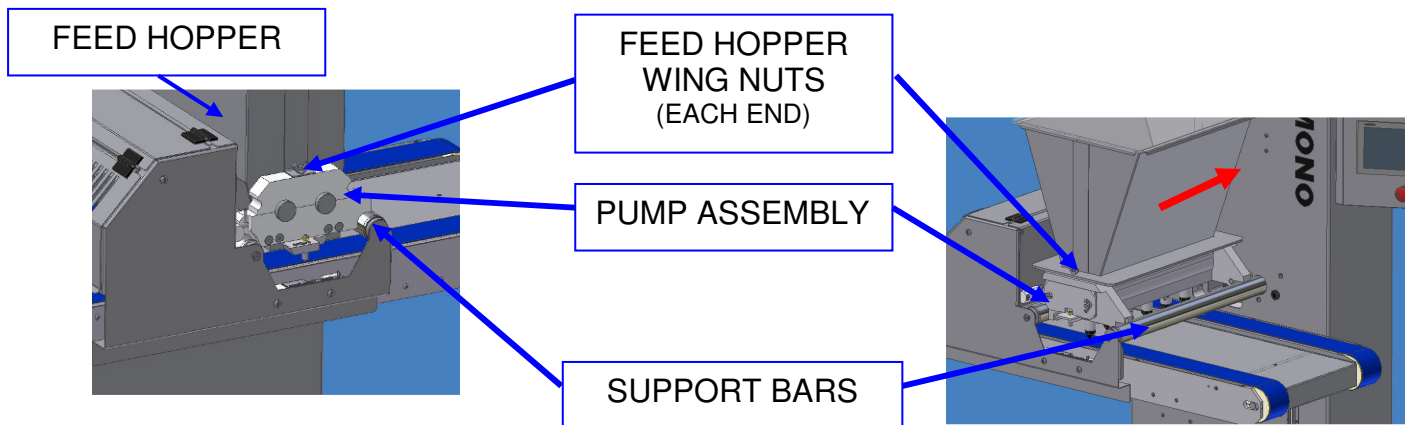


CAUTION SHOULD BE TAKEN WHEN FITTING THE HOPPER AND PUMP ASSEMBLY, AS WEIGHT EXCEEDS 25kgs ON SOME MODELS. It will need to be lifted on by two people, or dismantled into smaller components before fitting on the machine. MAKE SURE THE FLOOR AREA AROUND THE MACHINE IS CLEAN



To reduce weight and bulk, fit the complete hopper assembly in two stages - first the pump assembly onto the support bars, then the feed hopper body onto the pump assembly.

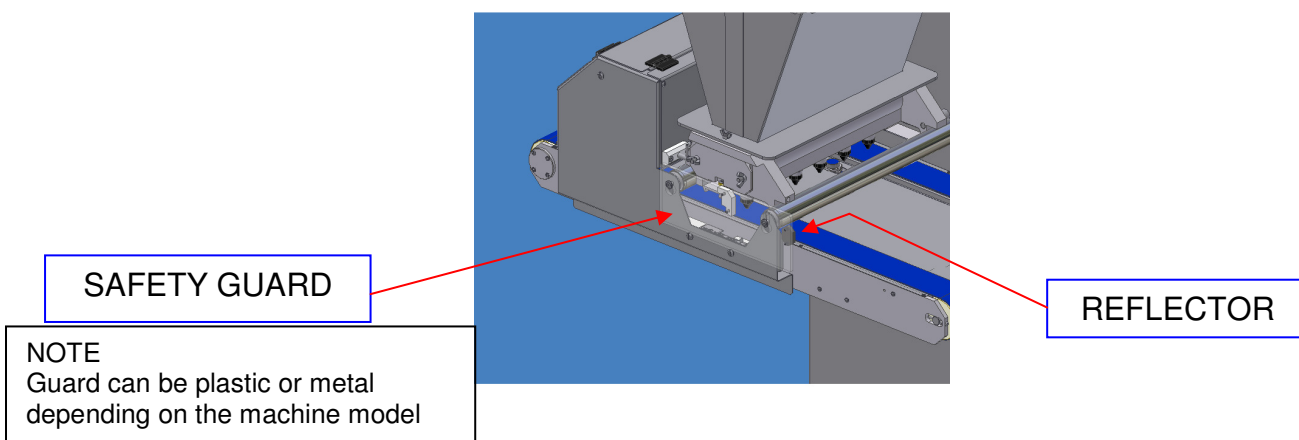
- 1 By hand, align pump assembly drive gear roller with drive shaft on machine.
- 2 Fit hopper to pump assembly and secure with wing nuts.
- 3 Slide hopper on support bars until fully up against machine.



HARD DOUGH

SOFT DOUGH

- 4 After the hopper is fitted, the safety guard **MUST BE** replaced with the reflector facing towards the machine body.



DO NOT OPERATE MACHINE WITHOUT TEMPLATE FITTED

9b FITTING A TEMPLATE

- **Soft dough**

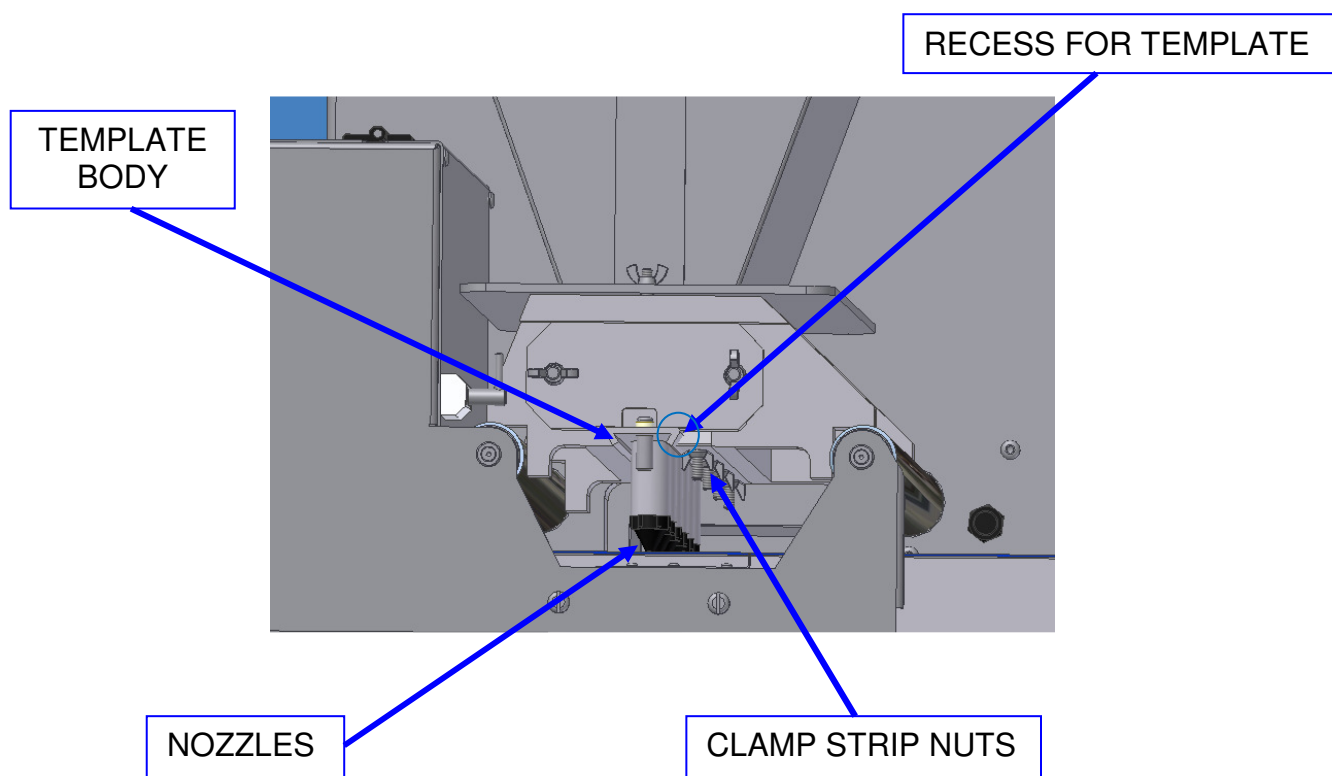
Non-rotary templates can be fitted with nozzles. This requires screwing the nozzles into the threaded holes provided.

Rotary templates can have plastic nozzles screwed into nozzle holders (straight or offset).

OR

Metal nozzles secured in place by a separate nut.

- 1 Select template and nozzles required.
(Nozzles are not required for sheeting, staggered or stub templates)
- 2 Attach nozzles to template body:



- 3 Slide the template into the matching recess at the base of the pump assembly until the stop is in position.
- 4 Tighten the nuts on the clamp strip (on underside of pump assembly) to secure template.

NOTE. If the nuts are not securely tightened, leakage of mix will occur, affecting deposit weights.



DO NOT OPERATE MACHINE WITHOUT TEMPLATE FITTED

ERROR: stackunderflow
OFFENDING COMMAND: ~

STACK: